

**STATISTICAL EVALUATION OF A SET OF GEOCHEMICAL DATA FROM A LARGE COLLECTION OF MOLDAVITES MEASURED BY INAA AND IPAA.**

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**Introduction:** Moldavites represent classical tektites and occur mainly on the territory of the Czech Republic. Central European tektite (CET) strewn field is traditionally subdivided into several parts. Here we test the difference between individual partial strewn fields based on the results of a comprehensive chemical study and attempt to delineate the role of expected moldavite precursor rocks.

**Samples and methods:** A well-documented collection of 80 moldavites from South Bohemian, Western Moravian, Cheb and Lusatian partial strewn fields has been characterized compositionally by determination of 52 major, minor, and trace elements using various modes of instrumental neutron activation analysis and instrumental photon activation analysis. In addition to chemical composition also the color has been measured quantitatively by colorimetry. The data have been processed with a statistical package SYSTAT.

**Results and conclusions:** Statistical analysis and plotting of the chemical data for studied suite of moldavites showed that some common trends exist, however, for several elements or their ratios there are differences among different parts of the entire CET strewn field. These differences obviously reflect a variable composition of the source material.

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